

corresponding ones. The inferior and external margin of the propodos, from the extremity of the dactyloid process to the carpal articulation, is convex, and longer than that of the intero-superior margin of the propodos and dactylos together. The carpus is armed with three blunt and one sharp anteriorly directed teeth upon the inner edge, and two sharp strong teeth upon the under surface. The meros is furnished with two rows of teeth, that converge together towards the ischium upon the inner surface. The other pereopoda have little to attract attention. The second somite of the pleon has a tuberculous ridge just above the lateral margin. The inner scale of the posterior pair of pleopoda is furnished with a central row of short, sharp teeth; and the telson is armed with similar teeth, of which there are a few in the median line and others in two lateral obsolete rows.

The specimen from which the description is taken is a male. Of all the species of this genus, this form approximates the nearest to its marine allies, in the appearance of the great chelate pereopoda, of any that we are acquainted with. The generally close resemblance of the several species of this genus is certainly very remarkable, when we take into consideration the vast geographical distribution that it has—larger, perhaps, than that of any genus of Crustacea that is not of marine habits. Species have been taken in the frozen waters of North American rivers, in the hot latitudes of Chili, in temperate Europe and Tasmania, and now from the African island of Madagascar. We do not know of any having yet been recorded from the inland rivers of that continent.

DESCRIPTION OF PLATE XXVII.

- Fig. 1. *Astacus caldwelli*.
 2. Carapace, seen laterally.
 3. Second pair of antennæ.
 4. Squamigerous process of the same.

2. NOTE ON PSEUDORCA MERIDIONALIS. BY W. H. FLOWER, F.R.S., ETC.

In the last volume of the Society's 'Proceedings' (1864, p. 420) I described two Cetacean skulls from Tasmania, presented to the Museum of the Royal College of Surgeons by Mr. W. L. Crowther, under the name of *Orca meridionalis*. Having obtained some further information regarding this species, I wish to add a few notes to my previous paper.

As before mentioned, I had requested Mr. Crowther to obtain, if possible, a complete skeleton of the so-called "Blackfish," to which these skulls were said to belong. That gentleman, with a most praiseworthy desire to advance our knowledge of the Cetaceous animals of the part of the world in which he resides, set to work with great energy to collect specimens; and among a most valuable

consignment lately forwarded by him to the College Museum are two skeletons of animals called "Blackfish," accompanied, however, by the following important note:—"The Blackfish skeletons are of a different variety to the heads I sent you. In these this portion is *obtuse*, in the former ones *pointed* at the snout, whence they are called by the whalers, for the sake of distinction, 'peaked noses.'"

We learn from this that two very different animals are included under the common name of Blackfish by the inhabitants of the Australian coasts, and that the description given by Mr. Crowther, quoted in my notice of *Orca meridionalis*, does not apply to that animal at all, but rather to the "Blackfish" of which the skeletons are now sent, and which belong to the genus *Globiocephalus*.

Of the external appearance, habits, and geographical distribution of the *meridionalis* we know, therefore, next to nothing at present; but the fact of their having "peaked noses" corresponds with the external characters assigned by Reinhardt to the individuals stranded on the Danish coast, on which his genus *Pseudorca* is founded*, and entirely removes them from *Globiocephalus*.

A perusal of the memoir of the distinguished Copenhagen Professor, a translation of which will shortly be published by the Ray Society, has convinced me that *Pseudorca* is a distinctly characterized genus, intermediate between *Grampus* and *Orca* of Gray, separated from the latter more especially by the pectoral fins being small and pointed, instead of large, very broad, and oval†, and by the different form and very inferior size of the dorsal fin.

Until the remainder of the skeleton can be examined, or an accurate description of the external form obtained, there may still be some uncertainty as to whether the new Tasmanian species should be referred to the genus established by Reinhardt, although the probabilities are very greatly in favour of such a supposition. As to its specific distinction from *P. crassidens*, of course the external characters formerly given are now of no value; but from a comparison of the figures of the cranium in the 'Proceedings' with the specimens at Copenhagen, Professor Reinhardt has arrived at the same conclusion with myself.

I should take this opportunity of mentioning that in the figure of the upper surface of the skull (P. Z. S. 1864, p. 421) the artist has neglected to reverse his drawing on the block; the consequence is that the distortion of the nasal apertures is represented in the wrong direction.

* "*Pseudorca crassidens*, et for den Danske Fauna nyt Hvaldyr," K. Danske Vid. Selsk. Nov. 1862.

† The genus *Orca*, as Reinhardt has mentioned, is distinguished from other Cetaceans by having *all* the phalanges broader than long.